Curated Online Educational Resources for Teachers

Finding online educational resources to accompany lessons is daunting and time consuming for teachers in Guatemala. Dedicated teachers recommend learning resources through blogs or curate them through social bookmarking services, However, these resources remain dispersed throughout the Internet and are not aligned with the national curriculum. Limited time, slow Internet connections, and weak technical skills make it even harder for teachers (especially in rural contexts) to find relevant resources when these are needed.

CATEGORY

Access to Education

LOCATION

Guatemala

WHAT IS THE CHALLENGE OR NEED YOUR PROJECT WILL ADDRESS AND WHAT INNOVATIVE METHODS WILL YOU EMPLOY?

Describe the specific need or challenge that your team will address with this project Finding online educational resources to accompany lessons is daunting and time consuming for teachers in Guatemala. Dedicated teachers recommend learning resources through blogs or curate them through social bookmarking services, However, these resources remain dispersed throughout the Internet and are not aligned with the national curriculum. Limited time, slow Internet connections, and weak technical skills make it even harder for teachers (especially in rural contexts) to find relevant resources when these are needed.

Briefly describe the specific solution or approach to address the need or challenge and explain why it is innovative

Over the last three years one of the team members has made the full Guatemalan national curriculum available online in open-source wiki format (see: www.cnbGuatemala.org). Comprising the equivalent of over 50 volumes in hard copy, over 80,000 teachers use it monthly to plan their classes. We will now identify at least 35 effective science educational resources (descriptions, explanations, simulations) available on the Internet and create hyperlinks to the corresponding URL's from the curriculum to make them immediately available and properly contextualized when teachers access the page.

How will the project impact your community? What changes (in people, institutions, attitudes, practices) do you think you will see?

When educational resources are aligned and directly linked to the structure of the curriculum, teachers can save time accessing them immediately as they plan their classes. More significantly, accessing resources in the context of the lesson planning helps them make full sense of the resources, and contributes to their own mastery of the subject.

Linking curated OER's will narrow the gap between "what" (the curriculum), "how" (methodology) and "with what" (resources). It will build a bridge to effective teaching and learning in classrooms, especially to foster student-centered practices such as project-based and problem-based learning. Teachers will be able to go into the classroom better prepared to scaffold learners and assess their competency level.

WHO WILL BE INVOLVED?

WEBSITES

http://cnbGuatemala.org

http://facebook.com/cnbGuatemala.org

https://twitter.com/cnbGuatemal

MEET THE TEAM

Project owner

Monica Sulecio ...

Guatemala

Fulbright Faculty Development

Program (LASPAU)

Project members

Manage members
brenda Alonzo
Guatemala
E-Teacher
[remove from project]

Jacobo Nitsch
Guatemala
Fulbright Faculty Development
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[remove from project]

Felix Alvarado
Guatemala
Fulbright Student Program
[remove from project]

Mayra Yat Aguilar Guatemala Fulbright Student Program [remove from project]

Mario Yac Sr.
Guatemala
International Visitor Leadership
Program (IVLP)
Iremove from projectl

Leonel Morales
Guatemala
Fulbright Visiting Scholar Program
[remove from project]

Mahmoud Suliman Israel Fulbright Student Program [remove from project]

Evelyn Espinoza
Guatemala
Fulbright Student Program
[remove from project]

Beneficiaries: who are your target groups (or communities) and how many people will directly benefit from your project?

The curriculum wiki is visited by 3,150 users per day (Jan-Feb 2015). Elementary teachers, the target group for our project, account for 18% of the total amount of visitors (567 teachers). Our project focuses on 4th grade science, a subject which corresponds to approximately 2% of all page views in the wiki. However, we look forward to inspiring the use of OER's across the entire 4th grade curriculum since Guatemala's elementary teachers teach all subject areas. The project's will extend beyond its end date, as long as the online curriculum and the hyperlinked resources remain available. Based on an average student/teacher ratio of 23.8 in elementary schools in Guatemala, the project targets 13,495 students daily. We estimate reaching 269 students in science class (567*23.8*0.02). Also, based on access growth (from average 2,949 users a month in 2012 to 52,284 in 2014), mainly through mobile devices (from 2% in 2012 to 19% in 2015), we expect more teachers to use the wiki.

Mariela Isabel ...
Guatemala
Fulbright Faculty Development
Program (LASPAU)
Iremove from project

Local partners

The online national basic curriculum is endorsed by the Ministry of Education of Guatemala (MOE) and an agreement has been signed between one of us and the MOE to continue expanding its use and applicability. Building on this partnership, we will seek collaboration with the MOE through Departmental Directorates (the MOE's decentralized units) to access fourth grade teachers from five schools to conduct baseline and endline research seeking evidence of use and effects of the online curriculum and the aligned and curated resources. Interviews with teachers and classroom observations will be considered the main methods to explore current conditions and use of the online national curriculum with curated resources. Interviews with students will also be considered to explore their approach towards science learning.

Alumni team

Monica Sulecio de Alvarez, Team Leader (implementation, administrative/financial). Oversight of instructional design related to identification, alignment and curation of online educational resources. Administrative and financial management.

Felix Alvarado, Administrative Coordinator (implementation, administrative/financial). Administrative support for the project as well as institutional relations with Ministry of Education and media outreach and promotion.

Mariela Zelada, Technical Support (implementation). Research design, monitoring of technical activities, products and outcomes, analysis and reporting of results.

Mario Yac, Advisor (implementation). Monitoring of curated materials to make sure they meet semi-rural context needs.

Evelyn Espinoza, Advisor (implementation). Research design and analysis. **Jacobo Nitsch, Advisor (implementation).** Quality of digital materials reviewer.

Proposed Project Dates: July 01, 2015 - March 31, 2016

HOW AND WHEN WILL YOU IMPLEMENT YOUR PROJECT?

Implementing Plan and Timeline

- 1. Startup (July 2015)
- 1.1 Detailed programming: Tasks, responsibilities, dates and locations are refined.
- 1.2 Initial communication: Meeting with Ministry of Education (MOE) and Departmental Directorates (DD) to identify participating schools with Internet access.
- 1.3 Agreement: Five public schools accept participation with fourth grade teachers and their students
- 2. Design (August 2015)
- 2.1 Curriculum link structure: Revision of curriculum and selection of overall approach to link resources.
- 2.2 Resource curation framework: Agreement on a standard process to find educational resources for 4th grade science learning outcomes.
- 2.3 Research design: Definition of method to carry out baseline and endline evaluations

- 3. Technical and technological implementation (Ag 2015-Jan 2016)
- 3.1 Operational development of tools: Preparation of wiki forms.
- 3.2 Identification of Online Educational Resources: Curated resources are fed into a database with titles, descriptions and links.
- 3.3 Classification of resources: Educational resources are classified.
- 3.4 Linking of resources: Hyperlinks are created on the online curriculum pages.
- 3.5 Development of help resources: Online user help is created. A four-hour workshop with teachers from the five participating schools is designed. Teachers from 4h to 6th grade will be invited as well.
- 3.6 Dissemination: Full curated content is made available at the beginning of the school year (Jan 2016). Availability is communicated via Facebook, Twitter and other channels.
- 4. Teacher/classroom implementation (Jan-Feb 2016)
- 4.1 Teacher workshop: Workshop with teachers.
- 4.2 Teacher use of resources with students: Teachers are given February to use the recently curated section.
- 4.3 Tracking results: Collection of endline data with participating teachers.
- 5. Closeout and reporting (Mar 2016)
- 5.1 Technical reporting: Reports are prepared to share the experience and insights.
- 5.2 Dissemination of results: Results are presented to MOE and shared with the Department of Education of Universidad del Valle de Guatemala to interest them in replicating the exercise with another subject area via their "megaproject" experiences.
- 5.3 Administrative reporting: Administrative reports are prepared.

Communication Plan

Communications will have two goals: 1) build awareness of the resources, 2) disseminate information based on the results from the grant.

To build awareness, we will capitalize on: 1a) our partnership with the MOE to promote the website and resources through their communications channels (including their own websites), 1b) the online curriculum's own facebook page (www.facebook.com/cnbGuatemala.org), and 1c) presentations to teachers in the schools where we will be implementing the project. Upon award of the grant we will also contact the main national newspapers through journalists covering science, technology and education with a press release. Another press release will be used to communicate the availability of the curated section of the national curriculum in February 2016.

Evaluation

The assessment will include a baseline and an endline inquiry phases with the same group to explore how teachers are using the online national curriculum, and integrating technology in the learning activities that they propose to learners. Data collection methods may include: a) focus group and/or individual interviews with teachers, b) classroom observations, c) interview with students.

Our intention is to include qualitative and quantitative data to monitor and evaluate the process. Specific tools will be developed based on the data that will be collected. Since one of the main goals of the project is to promote the use of online educational resources, the monitoring and evaluation strategy will consider the approach for the integration of technology as one of the factors to be evaluated.

Sustainability

Funding will be used to identify, align, curate and link educational resources that already are available on the Internet to the already existing online national curriculum. This maximizes sustainability, as both the educational resources and the curriculum are already self-sustained. Once the curating and linking is performed, the resources identified will remain readily available to all users as long as the online curriculum and the educational resources continue to be available. Beyond this, our partnership with the MOE will seek to involve MOE staff and teachers in the process of identifying, aligning, curating and linking materials. Universidad Del Valle will be proposed to adopt the experience as part of their "mega-project" learning activity with ready-to-graduate students.

TOTAL FUNDING REQUESTED

\$7,040.00

PROPOSAL DOCUMENT:

Download budget